

Cooperative Learning Training

Module 1

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I. Introduction—Rationale and Background

“A man convinced against his will is of the same opinion still.”

“We see what is behind our eyes.”

A. Three Kinds of Learning

1. Independent – Students “work independently on their own learning goals at their own pace and in their own space to achieve a preset criterion of excellence.”
2. Competitive – Students “engage in a win-lose battle to see who is best.”
“The strong learn to glory, not in their strength, but that they are better.” –John Dewey. *Moral Principles in Education*
3. Cooperative – Students “work collaboratively in small groups, ensuring that all members master the assigned material.”

B. Frequently asked questions (p. 1.1)

1. Isn't it wrong to teach using cooperative methods when we must prepare students for a competitive world?
2. Isn't the accelerated achievement of low-achieving students bought at the expense of that of high-achieving students? Couldn't the high achievers learn more if they were not stuck tutoring the low achievers?
3. If I allow students to discuss and argue among themselves, won't I be faced with difficult classroom management problems?
4. Isn't cooperative learning in conflict with “back to basics” and direct instruction?
5. Doesn't cooperative learning mean forcing some students to work with others they don't like?
6. I was involved in a group project once. The group decided on a topic, and I had to go along although I did not agree. Doesn't cooperative learning mean giving up individuality?
7. In another group project, a few members did all the work. Doesn't cooperative learning mean a free ride for some or most of the group members?

C. Four Crises (p. 2.1): The Double Agenda of Cooperative Learning

1. The achievement crisis
2. The achievement gap crisis
3. The race relations crisis
4. The social skills crisis

D. What does the Evidence Say? (p 3.1)

- E. Seven Keys for Success (p. 5.1)
 - 1. Structures (p. 5.2)
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 - 6. Social Skills (p. 5.8)
 - 7. Basic Principles – PIES (p. 5.9)

P Positive Interdependence

Within cooperative learning situations students have two responsibilities: learn the assigned material and ensure that all members of their group learn the assigned material. Positive interdependence exists when students perceive that they are linked with groupmates in a way so that they cannot succeed unless their groupmates do. It is in the students' best interest to help others succeed.

I Individual Accountability

The purpose of cooperative learning is to make each person a stronger individual. Individual accountability is the key to ensuring that all group members are, in fact, strengthened by learning cooperatively.

E Equal Participation

In typical classrooms certain students participate much more than others. This pattern of unequal participation results in a learning environment where some students are continually engaged and others are rarely engaged. Low achievers, language and culturally different students, many students with special needs—the very students who most need to be included in the learning process tend to get left out.

S Simultaneous Interaction

In cooperative learning not only are students participating about equally, but they are participating frequently. When cooperative learning is functioning properly, as many students as possible are participating—responding—at the same time. Using cooperative learning structures will increase the total number of responses per minute, and will increase the number of students they come from—everyone. The Simultaneity Principle of cooperative learning is that the maximum number of students are participating and responding at the same time as possible, as opposed to traditional methods which are quite sequential in nature, and most often only one student at a time responds.

II. Ad hoc Grouping

Ad hoc grouping refers to the practice of forming cooperative learning teams which will stay together for a very short period of time, usually for a single lesson only. Major purposes for using ad hoc groups include:

- To practice using various structures and practices so that both the teacher and the students build skills and experience which will promote the success of more formal or long term teams; and
- To review, drill, or practice specific skills or knowledge when you are not in formal teams, or in a subject for which teams are not organized.

It is recommended that you use ad hoc teams lots of times before taking on formal cooperative learning teams. The more “dry runs” you make, the more success you are likely to have with formal teams. You will discover chemistry issues among students, introduce and develop the basic skills of group work and social interaction, and in general gain experience that will reduce students’ fears about working productively with others.

Here are some suggestions for forming ad hoc groups:

1. Form inside and outside circles. Do short interviews and then move on to another partner by moving one of the circles, e.g. “Inside circle, move two students to your right.” Be sure students have a chance to interview their friends as well as others.
2. Deal out a deck of cards for which there is four of the same kind. Have students find the other three that have the same card.
3. Form a single line and then “fold” it. You can form pairs, then do it again and form groups.
4. Cut pictures or shapes into four pieces, put them all in a box and have students each draw a piece. Students find the other three that combine to make the picture or shape.

Suggestion: To decide in your ad hoc groups who will be the reporter or recorder or whatever, have the group find out whose birthday is next, and then (surprise!) it is the person on their left. You get the idea. Be creative, spontaneous, and have fun!

Remember, use of ad hoc groups give students a safe, short-term environment in which to gain experience working together and helping each other. It’s easy and fun.

Rules of Group Learning

1. No one is finished until he or she is sure that every one of his or her teammates will get 100%.
2. When students have questions, they try to get answers within their teams before asking the teacher.
3. Teammates should explain answers to each other rather than simply checking each other and then going on.

Rules of Group Decision-Making

1. Each member has a say.
2. No decision is reached unless all consent.
3. No one consents if they have a serious objection.

Suggestion: You may want to make posters of these two sets of rules.
You will refer to them often!

III. Informal Strategies

A. Numbered Heads Together

1. Each student is assigned a number. Each team will have a 1, 2, 3, 4, etc. The teacher may assign the numbers or the team itself may decide. A highly recommended method is to assign them according to their relative physical position as they sit around the team table. In other words, all the "1s" will be the first student on the left, the "2s" will be next to them, and so on around the table/group going clockwise. Such a method is extremely useful, as it allows you to control who you call on during the activity. A concern you should pay attention to is to be sure kids understand this number is not a suggestion of their relative rank in the group in terms of ability. Kids will often assume this to be true. Many children will assume that 1 is automatically better than 4, and so on. Explain that the number is just their "address" for the activity.
2. Explain that you will ask a question. Give a signal such as a hand clap or bell or just say "Heads Together!" and then, as a group, they will have a few seconds (use your judgment as you get into the particular task as to how long) to make sure that everyone in their group knows the answer. As the kids get used to the activity you may want to set an exact amount of time for each question, such as 10 or 15 seconds.
3. Ask the question (usually a math fact, vocabulary word, etc.—usually a question with a correct answer). Monitor the group process, especially early on. Agree on a signal upon which they are to stop, such as the hand signal. Give the signal.
4. Call out a number. Only the student in each group whose number it is may respond. You may want to use a spinner or a die or some other way of randomizing which number you call so the kids don't start getting after you about not calling their number as much as the others—because they will!

Variations, Helps, Suggestions

1. If the question has more than one correct answer (the four food groups, members of one food group, members of the feline family, etc.) all of the "3's" (or whatever number you called) must give a different correct answer.
2. Rather than calling out a number and then calling only on one of those students, there are several ways to allow every "4" to answer: have all "1s" go to the chalkboard, thumbs up/thumbs down, team slates, response cards, and so on.

Numbered Heads Together

1. Assign each team member a number.
2. Ask a question.
3. Signal teams to confer with each other and make sure everyone knows the correct answer.
4. Call out a number.
5. Only students with that number can respond.

B. Think Pair Share/Square

1. Students listen carefully while the teacher poses a question.
2. Students are given TIME to THINK about the question.
3. Students are cued to pair up, where they each have a chance to discuss their response with the other person.
4. Students are then asked to share with the whole class—that is, class discussion.
5. In Think Pair Square, students share with the team rather than going to class discussion.

**This strategy is best for questions which require thought—
questions which may not have a "correct" answer.**

Strengths include:

1. It gives students a chance to THINK about their response before being asked or expected to give an answer—a new experience for many. Too often, we reward only those students who seem to think quickly, whether they think well or not (and punish those who do not think quickly, but DO think well).
2. It provides students a sounding-board to test their answers, and to rethink and refine their thoughts before having to share them.
3. It allows students to REHEARSE their answer before giving it publicly. Most of us know how reassuring such an opportunity can be, especially if we are unsure, timid, or for whatever reason lack confidence in that particular setting.
4. In general, use of this strategy allows students to give you their very best thoughts, rather than forcing quick, poorly-considered ideas. Doing so provides positive, successful experiences for students. As we all know, success begets success.

Listen → Think → Rehearse → Share

C. Roundtable (written responses) or Roundrobin (oral responses)

1. The Teacher asks a question which has as many answers as possible.
2. Each team member writes an answer, and then passes the paper on to the next person, who must write a different answer.
3. Impose time limits and other incentives.
4. Yes, team members can help each other!

Simultaneous Roundtable

Instead of a single paper going around. with lots of time for team members to think and coach and help their team, EVERY team member starts a paper and all the papers go around at the same time. This method dramatically increases the total number of responses, for each individual and for the team as a whole.

This strategy is most effective for questions which have as many correct answers as possible. It is designed to help students generate as many responses as possible.

For example...

- one paper going for each food group
- one paper going for each type of novel you've identified
- one paper going for each element of story construction
- one paper going for each sum or product you identify
- one paper going for antonyms, one for synonyms, etc.

D. Pairs Check

This strategy is usually used in math, but could conceivably be used in other subjects and applications. It is, of course, designed to successfully assist students and enhance learning during "seatwork" or "guided practice."

1. Divide into pairs (within teams).
2. Student #1 works the first problem on paper, while ...
Student #2 watches, coaches, checks, **and** PRAISES!
3. After both have written the first problem on their paper, they switch roles:
Student #2 works the next problem, while ...
Student #1 watches, coaches, checks, **and** PRAISES!
4. When the pair has finished two problems, they check with the other pair in their team. The whole team compares answers and processes (if necessary), and resolves any discrepancies or problems.
5. The whole team gives a "team handshake" (or whatever) and then go back to their pairs and repeat the process for the next two problems.

E. Three-Step Interview

1. Place students in teams of four. Assign each a number or letter (e.g. A, B, C, D).
2. Give an interview question.
3. Step 1: A interviews B, C interviews D.
4. Step 2: B interviews A, D interviews C.
5. Step 3: Each member of the group, in turn, shares with the group the information they learned from the person they interviewed.

The Three-Step Interview is used widely in classbuilding and teambuilding. It is also powerful as a tool for reviewing, summarizing, and focusing.

Suggested/sample questions:

- Tell me about your name. Where did you get it? Is it a family name? Nicknames? Have you had any funny experiences with your name?
- If you could visit with any person you wanted—past, present, or future—who would it be? Why? What would you ask them?
- If you could be any character in a book or (movie), who would it be? Why?
- What do you believe are the two most important things we learned today? Which are the two things you think are most likely to be on a test?
- Summarize the most critical points in the lesson so far.

IV. Assigning and Using Roles

We teach, assign, use, and debrief roles as a structure for teaching social skills.

An especially important component of successful cooperative learning is the careful, assignment of students to play specific roles within their group. While it is desirable that every student have a chance to play every role, it is very important that you use the roles as a way to individualize and provide for specific needs of certain students in your class. As the teacher—the one who knows that group better than any other person alive—you will know which students will benefit most from playing which roles.

It is important to teach students to analyze their individual and group progress, including strengths and weaknesses-as they continue to learn to play various roles. This should be done as debriefing occurs as the last activity of the cooperative learning exercise. This is a critical tool in the teaching of social/group skills.

Below are some suggested roles from From Spencer Kagan (see Chapter 11). Start "small" and help your students to successfully play two or three of the roles well before you introduce other more sophisticated ones. It is best that every person have a role to play.

Encourager – Encourage teammates to participate and do well.

Praiser – Show appreciation for teammates' ideas and contributions.

Cheerleader – Lead the team in celebrating.

Gatekeeper – Make sure everyone is participating about equally.

Coach – Coach teammates on solving a problem.

Question Commander – Check often to see if any teammates have a question.

Checker – Check to see if everyone has learned the assigned material.

Focus Keeper – Keep the team focused on the task.

Recorder – Record the team's answers or ideas.

Reflector – Lead the team in looking back on how well the team worked together.

Quiet Captain – Keep the team's volume level down.

Materials Monitor – Get and return supplies needed by the team. Lead the clean-up.

Read the summaries of these roles (p. 11.9 to 11.12) to learn and teach students what a person playing this role actually says. THIS is where the learning happens!

Suggestions:

- You may want to prepare and laminate the roles on cards and then pass them out to members of each group each day.
- **A great idea is to put suggested statements right on the cards to help students get started.**
- Another idea is to prepare an inside-outside wheel for each group with group members' names on one and the different roles on the other, so you will have a controlled way to rotate roles.

V. Debriefing or Group Processing

A. Definition and Ground rules

Debriefing refers to the process of taking a minute at the end of each lesson to have class members discuss what they felt their group

1. did well—behaviors that promoted learning and successful task accomplishment, and
2. did not do well—behaviors that detracted or interfered.

The most important ground rule is that no one uses a name. Discuss and name the behavior, NOT the behavior. Good AND bad. This is tough, but important. You will find it useful to teach students to use plural pronouns as they debrief. Teach them to use "we" and "our" rather than "he" or "she" or a specific student's name. There are compelling reasons to do so:

1. You want to avoid having the team turn on one of its members (even though they may deserve it!);
2. You want the team as a whole to own its problems and take initiative, under your directions and instruction, for solving them and helping each other; and
3. You want students to think about specific behaviors that promote or detract from success, rather than stop short of that and only think about which people were helping or hurting the group. *This is a critical metacognitive issue.*

You will find yourself debriefing many processes and behaviors as you become more and more proficient at cooperative learning lesson design. Some beginning points are:

- B. Content – You will, of course, continue to debrief content, as you always have.
"As a group, make a list of five things you thought were most important in today's lesson. In five minutes you will share your ideas with each other."
- C. Specific Strategies – You will debrief specific strategies you see groups using successfully as they carry out group tasks.
"What did the Brainiacs do during the lesson today that helped them get so many answers?" "What was the best thing your group did today?"
- D. Roles – You will debrief specifically on the formal roles students are taught and asked to play.
"How did the praising go in your group today? What went well? What would you like to do better next time?"

Debriefing, or Group Processing, is one of the things that will "make or break" your efforts to help students work productively together. Experience shows that teachers who choose to not debrief will not be successful in getting students to help each other effectively. Regular, effective debriefing is not just important, it is necessary—a must. It is where most of the great teaching of affective and process outcomes will be going on.